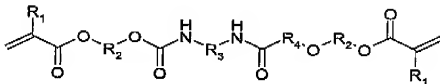


AMENDMENTS TO THE CLAIMS

1-16. (Cancelled)

17. (Currently Amended) A pressure-sensitive radiation curable adhesive formulation comprising (by weight):

100 parts of one or more urethane (meth)acrylate polymer(s) of Formula 1A:



Formula 1A

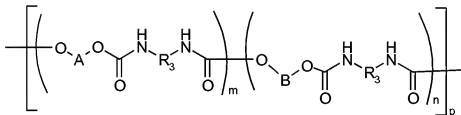
where:

R₁ is hydrogen or methyl;

R₂ is a divalent residue derived from alkyl or alkoxy hydroxy (meth) acrylate(s);

R₃ is a divalent residue derived from aliphatic, cycloaliphatic, heterocyclic and/or aromatic diisocyanate(s);

R₄ is a divalent random block copolymer backbone of Formula 2A:



Formula 2A

where:

A is a divalent residue derived from one or more acrylic-derived polyol(s);

B is a divalent residue derived from one or more rubber-derived polyol(s);

m and n are independently an integer from 1 to 20; and

p is from about 2 to about 50;

obtained by a two stage process comprising the steps of:

(a) first, building an isocyanate terminated pre-polymer by a urethane condensation reaction between a mixture of polyols derived from acrylic and rubber polyols and excess NCO groups provided by difunctional isocyanates,

(b) followed by capping the isocyanate terminated pre-polymer with hydroxyl group-containing (meth)acrylates;

together with from about 1 to about 120 parts of one or more tackifiers;

said radiation curable adhesive composition having a weight ratio of rubber-derived polyol to acrylic-derived polyol of from 0.1 to 10.

18. (Currently Amended) The pressure-sensitive radiation curable adhesive composition as claimed in claim 17 wherein the polymer has a z-average molecular weight (M_z) measured by gel permeation chromatography (GPC) from about 50 to about 5,500 kDa.

19. (Currently Amended) The pressure-sensitive radiation curable adhesive composition as claimed in claim 17 wherein the polymer has a weight average molecular weight (M_w) measured by GPC from about 1 to about 1,000 kDa.

20. (Currently Amended) The pressure-sensitive radiation curable adhesive composition as claimed in claim 17 wherein the polymer has a number average molecular weight (M_n) of from about 1 to about 100 kDa.

21. (Currently Amended) The pressure-sensitive radiation curable adhesive composition as claimed in claim 17 wherein the polymer has a density of radiation curable functional groups (measured as molecular weight per group) from about 1 to 150 kDa.

22. (Previously Presented) A method for making a urethane (meth)acrylate polymer by a two stage process comprising the steps of:

(a) first, building an isocyanate terminated pre-polymer by a urethane condensation reaction between a mixture of polyols derived from acrylic and rubber polyols and excess NCO groups provided by difunctional isocyanates,

(b) followed by capping the isocyanate terminated pre-polymer with hydroxyl group-containing (meth)acrylates.

23. (Currently Amended) A film laminate comprising a plurality of layers and between at least two thereof, is the pressure sensitive radiation curable adhesive composition as claimed in claim 17.

24. (Currently Amended) The pressure-sensitive radiation curable adhesive composition as claimed in claim 17 wherein the rubber derived polyol is selected from polybutadiene derived polyols, hydrogenated polybutadiene derived difunctional polyols, poly(ethylene/butylene) derived difunctional polyols, non-crystalline polyether glycols and mixtures thereof.

25. (Currently Amended) The pressure-sensitive radiation curable adhesive composition as claimed in claim 17 wherein acrylic derived polyol is selected from acrylic polyols having a glass transition temperature from -85°C to 30°C.

26.(Cancelled)

27. (Currently Amended) The pressure-sensitive radiation curable adhesive composition as claimed in claim 17 wherein R₂ is an alkyl or alkoxy residue.

28. (Currently Amended) The pressure-sensitive radiation curable adhesive composition according to claim 17 wherein said one or more tackifiers are present at from about 20 to about 80 parts.

29. (Currently Amended) A film laminate comprising a plurality of layers and between at least two thereof, is the pressure-sensitive radiation curable adhesive composition as claimed in claim 27.

30. (Currently Amended) A pressure-sensitive radiation curable adhesive composition consisting essentially of the urethane (meth)acrylate polymer of claim 17 and one or more tackifiers.

31. (Currently Amended) A pressure-sensitive radiation curable adhesive composition consisting essentially of the urethane (meth)acrylate polymer produced by the process of claim 22 and one or more tackifiers.